

UNIVERSITY OF BOLTON

OFF CAMPUS DIVISION

ISTT ZAMBIA

MSC SUPPLY CHAIN MANAGEMENT

SEMESTER 2 EXAMINATION 2019/20

FINANCE FOR MANAGERS

MODULE NO. EBU7005

Date: 12th January 2020

Time: 3 hours

INSTRUCTIONS TO CANDIDATES:

There are 6 questions on this paper.

Answer 4 questions.

All questions carry equal marks.

Additional materials required: Discount table

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Question 1

Boma plc has six subsidiary operating companies, one of which is Doba Ltd. The Boma group has a centralised treasury department which deals with the funding of all capital investments.

The following is an extract from a memorandum distributed to the directors of subsidiary companies in the group.

New capital investments are undertaken only if they can be shown to bear at least a 12% return on capital employed, where capital employed comprises the subsidiary's fixed assets at net book value plus stocks. The average rate of return (ARR) method of investment appraisal is to be used, i.e. using Average Profit to Average Capital Employed and disregarding debtors and creditors.

The most recent financial statements of Doba Ltd show that it generated an operating profit margin of 12.5% on turnover of K115, 600,000.

The following figures apply to the most recent balance sheet date.

	K' million	K' million
Fixed assets at net book value		50.0
Current assets		
Stock	18.0	
Debtors	12.5	
Cash	<u>1.5</u>	
		32.0
Current liabilities		<u>(22.0)</u>
Net assets employed		<u>60.0</u>

The Directors of Doba are considering an investment in new plant which will cost K10million and will have a resale value of K 1.0 million at the end of its four-year operating life. The new plant will result in a larger level of output as well as improved product quality.

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Question 1 continued..

The settlement period for trade creditors is currently 90 days. The Directors believe that extending the settlement period will allow the extra volume produced to be sold on to existing customers.

A price of K50 per unit is to be charged to customers in the first year in which the new plant is in use. In order stay competitive, it is considered that prices will need to be reduced by K4 each following year.

With these price reductions, it is anticipated that the additional sales volume generated will be as follows:

Year	Units
1	150,000
2	140,000
3	140,000
4	120,000

Throughout the life of the investment, the higher levels of output will necessitate additional stocks of K350, 000 being held. Operating costs will be an estimated K12 per unit. Centrally allocated overheads, which are unaffected by the new investment, amount to K8 per unit.

Required

- a) Evaluate the investment using the ARR method as indicated above. **(8marks)**
- b) Explain briefly the main drawbacks of using the average rate of return (ARR) method for evaluating new projects **(3 marks)**
- c) Discuss briefly why you think the ARR method is still used, in spite of its drawbacks. **(3 marks)**
- d) Outline the principles of the discounted cash flow (DCF) approach to capital investment appraisal? **(5 marks)**
- e) Further;
 - i. Explain briefly the problems which may arise for Doba Ltd if it extends the credit period offered to customers. **(3 marks)**
 - ii. Outline the methods by which the creditworthiness of new and existing customers should normally be assessed by a company. **(3 marks)**

(Total 25 marks)

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Question 2

Critically evaluate the main sources of finance available to a listed company.

(Total 25 marks)

Question 3

You are given the following information:

- Fixed costs per annum are K60 000
- Unit selling price K20
- Unit variable cost K10
- Existing sales 8 000 units
- Relevant range of output 4 000 – 12 000 units

Required:

- a) Calculate breakeven point in units and in value. **(6 marks)**
- b) What units must be sold to obtain a profit of K30 000? **(4 marks)**
- c) What is the profit if fixed costs are reduced by K10 000 and a 10% reduction in variable cost? **(5 marks)**
- d) What selling price should be charged to show a profit of K30 000 on sales of 8 000 units? **(4 marks)**
- e) What additional sales volume should be made to meet K8 000 additional fixed costs? **(6 marks)**

(Total 25 marks)

Question 4

- a) Evaluate the importance of “Working Capital” to a profit-making company. **(10 Marks)**
- b) Discuss the ways in which the components of working capital can be managed effectively.

(15 marks)

(Total 25 Marks)

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Question 5

The Financial statements for Sparks Electrical Engineering plc are as follows:

Profit and loss account**Year ended 31 March**

	2014	2009
	K'000	K'000
Turnover	60,000	50,000
Cost of sales	<u>42,000</u>	<u>34,000</u>
Gross Profit	18,000	16,000
Distribution expenses	10,500	8,800
Administration expenses	<u>5,000</u>	<u>4,200</u>
Operating profit	2,500	3,000
Interest payable	<u>2,200</u>	<u>1,300</u>
Profit before tax	300	1,700
Taxation	<u>100</u>	<u>600</u>
Profit for the year	200	1,100
Dividends	<u>800</u>	<u>600</u>
Retained profit	<u>(600)</u>	<u>500</u>

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Balance Sheet

As at 31 March

	2014	2015
	K'000	K'000
<i>Non-Current assets</i>		
Intangible	900	-
Tangible	<u>12,000</u>	<u>11,000</u>
	12,900	11,000
<i>Current assets</i>		
Inventories	14,000	13,000
Trade receivables	16,000	15,000
Cash	<u>500</u>	<u>500</u>
	30,500	28,500
<i>Current liabilities</i>		
<i>Accounts Payable</i>	<u>24,000</u>	<u>20,000</u>
Net current assets	6,500	8,500
Total assets less current liabilities	19,400	19,500
Long-term liabilities	<u>6,000</u>	<u>5,500</u>
Net Assets	<u>13,400</u>	<u>14,000</u>
<i>Shareholders' equity</i>		
Share capital	1,300	1,300
Share premium	3,300	3,300
Revaluation reserve	2,000	2,000
Retained profit	<u>6,800</u>	<u>7,400</u>
	<u>13,400</u>	<u>14,000</u>

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Required:

a) Calculate the following ratios for both years 2014 and 2015:

- | | |
|-----------------------|----------------------|
| 1. Current ratio | 2. Acid-test ratio |
| 3. Stock turnover | 4. Debtors' turnover |
| 5. Creditors turnover | 6. Gross profit % |
| 7. Net profit % | 8. Asset turnover |
| 9. ROCE | 10. Gearing |
| 11. Interest cover | 12. Dividend cover |

(8 marks)

b) Making full use of the information given in the question, comment on the performance of the business and recommend action for management **(12 marks)**

c) Critically evaluate the limitations of using ratio analysis **(5 marks)**

(Total 25 Marks)

QUESTION 6

Critically evaluate whether a quoted company's directors should seek only the maximization of the company's profit? **(Total 25 marks)**

END OF QUESTIONS

Discount Factor Table

$$DF = 1 / (1+r)^n$$

Year	Rate										
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
0	1	1	1	1	1	1	1	1	1	1	1
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522

Year	Rate									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
0	1	1	1	1	1	1	1	1	1	1
1	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8475	0.8403	0.8333
2	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.7305	0.7182	0.7062	0.6944
3	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.6244	0.6086	0.5934	0.5787
4	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.5337	0.5158	0.4987	0.4823
5	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4561	0.4371	0.4190	0.4019
6	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3898	0.3704	0.3521	0.3349
7	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.3332	0.3139	0.2959	0.2791
8	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2848	0.2660	0.2487	0.2326
9	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.2434	0.2255	0.2090	0.1938
10	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.2080	0.1911	0.1756	0.1615